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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 10/634,114   | 08/04/2003  | Gary D. Glick        | UM-08192                      | 6392             |
| 72960  | 7590        | 10/09/2007           |                               |                  |
| Casimir Jones, S.C.<br>440 Science Drive<br>Suite 203<br>Madison, WI 53711 |             |                      | EXAMINER<br>EBRAHIM, NABILA G |                  |
|  |             |                      | ART UNIT                      | PAPER NUMBER     |
|  |             |                      | 1618                          |                  |
|  |             |                      | MAIL DATE                     | DELIVERY MODE    |
|  |             |                      | 10/09/2007                    | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                       |  |
|------------------------------|--------------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/634,114 | <b>Applicant(s)</b><br>GLICK, GARY D. |  |
|                              | <b>Examiner</b><br>Nabila G. Ebrahim | <b>Art Unit</b><br>1618               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 12-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Allowability of the claims in the office action dated 11/16/06 is herein withdrawn.

#### ***Prosecution***

Prosecution of the application has been transferred from Examiner Vickie Kim to Examiner Nabila Ebrahim.

#### ***Status of Claims***

Claims 1, 12-20 are pending in the application.

***Status of Office Action:*** non-final

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. the claim recites "wherein said drug-eluting stent is in contact with a drug-eluting stent", the claim is vague in the sense that it does not clearly explain if the drug is in the stent or is included in a stent coating. An explanation is required.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject

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matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al (Synthesis of 3-Substituted 1,4-Benzodiazepin-2.ones, Braz. Chem. .,foc., Vol. 9, No. 4, 375-379, 1998. **provided by Applicant in the IDS dated 4/6/05**); (hereinafter Kim) in view of Punegova et al. RU 2096044 (abstract), and further in view of Soykan et al. US 6824561 (Soykan).

Kim teaches a novel BZ-423 compound that is benzodiazepine analog, see abstract. the reference teaches the recited compound is sharing all the pharmacological activities with benzodiazepine, see page 375.

Kim does not disclose the use of the disclosed compounds in a stent.

Punegova teaches melatonin based implant composition for controlling biological rhythm in animals. The composition comprises (in wt.%): 10-40 melatonin, 55.5-89.95 Tsiakrin-EO (ethylcyanoacrylate-based polymer), 0.05-4.5 plasticiser (phthalate,

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alkylcyanoacetate or triacetin). A psychotropic drug e.g. phenothiazine or benzodiazepine derivatives is optionally included in an amount of 7-25 wt.%. Note that stent are types of implants (as evidenced by Kullinan et al. US 6147092 who teaches that an example of local delivery by an implant is the use of a stent. Stents are designed to mechanically prevent the collapse and reocclusion of the coronary arteries. Incorporating a pharmaceutical agent into the stent delivers the drug directly to the proliferative site, see col. 11, lines 16+).

It would have been obvious to one of ordinary skill in the art to deliver the compound recited in claim 1 (Bz-423) in a stent because Punegova teaches that Benzodiazepine derivatives can be included in an implant which can be a stent. It would have been obvious because a person of ordinary skill has good reason to try different and recently known derivatives of Benzodiazepines for elution in a stent, it is likely that bz-423 in a stent is not innovative but of ordinary skill and common sense.

Neither of the references teaches delivering the combinations of the drugs recited in the instant claims through the stent.

Soykan teaches implantable system with drug-eluting cells for on-demand local drug delivery. The implantable system is a stent comprising a composition which in turn comprise drugs such as nitric oxide, prostaglandin H synthase (to restore an endogenous inhibitor of platelet aggregation and vasoconstriction (col. 9, lines 31+), antiplatelets (col. 10, line 27), anti-inflammatory (col. 12, line 4). The reference discloses that it was known in the art to use stents for delivering a drug e.g., antiplatelet agents, anticoagulant agents, antimicrobial agents, antimetabolic agents (col. 1, lines 56+) and

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also that stents seeded with autologous endothelial cells were known in the art since the year 1989 (col. 2, lines 12+).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine any of the drugs disclosed by Soykan with the benzodiazepine compound recited in claim 1 to enhance the effect of the drug comprised in the stent implanted according to the condition being treated. The skilled artisan would expect success since these drugs were known previously in the art to be effective when delivered from a stent. Accordingly, the whole invention was prima facie obvious to one of ordinary skill in the art.

#### ***Correspondence***

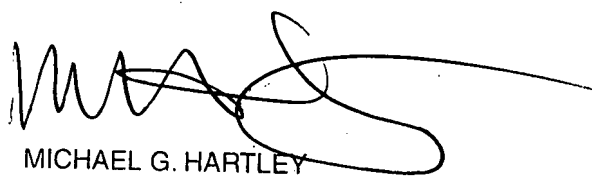
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nabila G. Ebrahim whose telephone number is 571-272-8151. The examiner can normally be reached on 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nabila Ebrahim  
9/28/07



MICHAEL G. HARTLEY  
SUPERVISORY PATENT EXAMINER